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ABSTRACT

This study employed self-reports from seventh- and tenth-graders to examine parents' level of education and features of parent-adolescent relationships as predictors of adolescents' academic performance. Features of parent-adolescent relationships were assessed as follows: mothers' and fathers' influence with respect to academic performance, subjective closeness with mothers and with fathers, and positive and negative emotions experienced in relationships with mothers and fathers. Adolescents' academic performance was assessed by grade point average, academic functioning, and academic motivation. Findings showed stronger associations between the predictors and the criteria for participants in the tenth grade. In addition, features of adolescents' relationships with mothers, as compared to those with fathers, were more consistently correlated with tenth-graders' academic performance. Overall, prediction of academic performance for the tenth-grade sample was highly related to affective features of parent-adolescent relationships, and academic functioning was the most consistently predicted criterion. Parents' education was not as strong a predictor as expected. However, mothers' education was found to be a significant, negative predictor of tenth-graders' academic motivation. (Author/EV)

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Parents' Education and Features of Parent-Adolescent Relationships as Predictors of Adolescents' Academic Performance

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Abstract

This study employed self-reports from seventh- and tenth-graders to examine parents' level of education and features of parent-adolescent relationships as predictors of adolescents' academic performance. Features of parent-adolescent relationships were assessed as follows: mothers' and fathers' influence with respect to academic performance, subjective closeness with mothers and with fathers, and positive and negative emotions experienced in relationships with mothers and fathers. Adolescents' academic performance was assessed by grade point average, academic functioning and academic motivation. The results show stronger associations between the predictors and the criterions for participants in the tenth grade. In addition, features of adolescents' relationships with mothers, as compared to those with fathers, were more consistently correlated with tenth-graders' academic performance. Overall, prediction of academic performance for the tenth-grade sample was highly related to affective features of parent-adolescent relationships and academic functioning was the most consistently predicted criterion. Parents' education was not as strong a predictor as expected. However, mothers' education was found to be a significant, negative predictor of tenth-graders' academic motivation. Implications of these findings are discussed.

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Introduction

Recent research has focused on identifying how various parent influences are related to adolescents' academic performance. A number of researchers have identified parental involvement as a significant predictor of academic performance during adolescence (Paulson, 1994; Herman, Dornbusch, Herron & Herting, 1997). In addition, affective features of parent-adolescent relationships have been identified as significant correlates of adolescents' academic performance. For example, parents' warm-supportive behavior and hostile behavior have been linked to adolescents' school performance (Repinski & Shonk, 1999), as have reports of family cohesion and expressiveness (Wood, Chapin & Hannah, 1988).

The search for predictors of adolescents' academic performance also has included consideration of parents' education. These studies have yielded somewhat mixed results. For example, Melby & Conger (1996) and Otto & Atkinson (1997) found that parents' level of education was positively correlated with adolescents' school performance, yet failed to make a unique contribution when parental involvement was included in the analysis. Differences also have been found between mothers and fathers; mothers' level of education, as compared to fathers', was more strongly related to adolescents' educational aspirations (Smith, 1991).

The purpose of the present study was to examine parents' education and features of parent-adolescent relationships as predictors of three measures of academic performance for seventh- and tenth-graders. Specifically, our goal was to examine how parents' education, parents' influence with respect to academic performance, subjective closeness with mothers and with fathers, and positive and negative emotions experienced in relationships with mothers and fathers predict adolescents' grade point average, academic functioning, and academic motivation.

Method

Participants

- 64 seventh-grade adolescents (35 male, 29 female) from a rural school
- 43 tenth-grade adolescents (15 male, 28 female) from a rural school

Procedures

- All participants received parental consent and were given a stipend of $5.00.
- Self-report data was collected from seventh- and tenth-grade adolescents.
- Adolescents' grades from the most recently completed marking period were obtained from school records.

Predictors

- Mothers' & Fathers' Education were assessed using adolescents' reports on the level of education completed by each parent.
- Mothers' & Fathers' Academic Influence were measured using a seven item scale in which participants rated each parents' influence (e.g. "how well I do in school" and "my career/occupation in the future") on a scale of 1 (not at all) to 5 (a great extent).
- Positive Emotions & Negative Emotions in relationships with mothers and with fathers were measured using adolescents' reports on the frequency during the past week with which they experienced six positive emotions (e.g., "satisfied" and "cared for") and 13 negative emotions (e.g., "frustrated" and "disappointed") in their relationship with each parent on a scale of 1 (never or almost never) to 5 (almost always).
- Subjective Closeness of parent-adolescent relationships were measured using adolescents' reports on their feelings of closeness to each parent on a scale of 1 (not close at all) to 5 (very close). Adolescents' feelings of closeness were reported in comparison to 1) their other relationships and 2) their friends' parent-adolescent relationships.

Criterions

- Grade Point Average (GPA) was determined by averaging adolescents' grades in social studies, math, English, and natural science courses from the most recently completed grade period.
- Academic Functioning, defined as adolescents' perceptions of their academic engagement and their school-related efficacy, was measured using a 15-item scale. Items (e.g., "I usually finish my homework" and "I do well in school even in hard subjects") were answered on a scale of 1
  (not at all) to 5 (a great extent).
- Academic Motivation was assessed using five vignettes containing hypothetical school dilemmas (e.g., studying for a big exam versus going to a concert). Adolescents were asked to decide what they think the student in the vignette should do on a scale of 0 (definitely go to the concert) to 10 (definitely stay home and study).

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Results

Correlational Analyses (see Table 1)

Seventh-graders' reports

Mothers

- No significant correlations were found between mothers' education or mother-adolescent relationship features and adolescents' academic performance for the seventh-grade sample.

Fathers

- Fathers' education was positively correlated with seventh-graders' GPA.
- Fathers' academic influence was positively related to academic motivation.

Tenth-graders' reports

Mothers

- Positive and negative emotions experienced in relationships with mothers correlated significantly with tenth-graders' GPA in the expected directions.
- Mothers' academic influence, positive and negative emotions experienced in relationships with mothers, and subjective closeness in relationships with mothers significantly correlated with academic functioning in the expected directions.
- Mothers' academic influence and positive emotions experienced in relationships with mothers were positive correlates of academic motivation, whereas mothers' education was a negative correlate of academic motivation.

Fathers

- Positive emotions experienced in relationships with fathers positively correlated with tenth-graders' GPA.
- Fathers' academic influence, positive and negative emotions experienced in relationships with fathers, and subjective closeness in relationships with fathers significantly correlated with academic functioning in the expected directions.

Multiple Regression Analyses (see Table 2)

Seventh-graders' reports

- Given the limited number of statistically significant correlations for the seventh-graders, multiple regression equations were not constructed for this age group.

Tenth-graders' reports

Mothers

- Negative emotions experienced in relationships with mothers was a unique, negative predictor of tenth-graders' GPA. In combination, the examined predictors explained 30% of the variance in tenth-graders' GPA.
- Mothers' academic influence was a unique, positive predictor of academic functioning. In combination, the examined predictors explained 34% of the variance in tenth-graders' academic functioning.
- Positive emotions experienced in relationships with mothers was a positive predictor of academic motivation, whereas mothers' education was a negative predictor of academic motivation. In combination, the examined predictors explained 30% of the variance in tenth-graders' academic motivation.

Fathers

- Positive emotions experienced in relationships with fathers was a unique, positive predictor of academic functioning. In combination, the examined predictors explained 28% of the variance in tenth-graders' academic functioning

Discussion

Results show stronger associations between the predictors and outcomes of interest for the participants in the tenth-grade sample. In addition, features of adolescents' relationships with mothers, as compared to those with fathers, were more consistently correlated with tenth-graders' academic performance. These findings concur with those of others who reported that maternal predictors were more frequently associated with adolescents' academic performance (Paulson, 1994; Wentzel, Feldman & Weinberger, 1991).

For the tenth-grade sample, prediction of academic performance was highly related to affective features of parent-adolescent relationships. Negative emotions experienced in relationships with mothers was a unique predictor of adolescents' GPA, positive emotions experienced in relationships with mothers was a predictor of adolescents' academic motivation, and positive emotions experienced in relationships with fathers was a unique predictor of adolescents' academic functioning. Although the examined affective features of adolescents' relationships with mothers and fathers varied in their prediction of the criterions, the findings nevertheless point to the salience of the affect experienced in relationships with mothers and fathers for predicting adolescents' academic performance.

For the tenth-grade sample, adolescents' academic functioning was the most consistently predicted criterion studied. All of the predictors significantly correlated with academic functioning except mothers' and fathers' education. Furthermore, when mother-adolescent relationship features were combined, mothers' academic influence was a significant, unique predictor of adolescents' academic functioning. When father-adolescent relationship features were combined, positive emotions experienced with fathers was a significant, unique predictor of adolescents' academic functioning. The patterns of these findings may be a consequence of method variance. Specifically, features of relationships with parents and adolescent functioning were both self-reported measures and as such could have produced more significant results than did analyses which included a more objective measure of academic performance (i.e., GPA).

Parents' education was not as strong a predictor as expected. For the seventh-grade sample, fathers' education was positively correlated only with GPA. For the tenth-grade sample, mothers' education was a negative predictor of academic motivation. While the negative association between mothers' education and academic motivation may seem counterintuitive, similar results were obtained by Smith (1991) who reported a negative association between adolescents' educational goals and perceived maternal educational goals when the mother had a least a four-year college degree. Perhaps parallel processes were at work for this sample.

Features of parent-adolescent relationships in the tenth-grade sample were strongly linked to adolescents' academic performance, yet results showed very few significant correlations for the seventh-grade sample. This may be partly due to seventh-graders' inability to recognize parental contributions to their academic performance. Further, the present findings may be explained by grade-related increases in academic pressure (Eccles, et al., 1993). Specifically, the quality of relationships with mothers and with fathers may have a more salient impact on tenth-graders' academic performance due to the increased academic pressure they experience.

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TABLE 1. Intercorrelations Between Parents' Education, Parent-Adolescent Relationship Features and Adolescents' Academic Performance.

	Seventh Grade (N=64)			Tenth Grade (N=43)		
	GPA	Academic Functioning	Academic Motivation	GPA	Academic Functioning	Academic Motivation
Mothers						
Education Level	11	23+	04	15	20	-31*
Academic Influence	-15	05	04	24	51**	31*
Positive Emotions	15	17	03	47**	47**	36*
Negative Emotions	-19	-13	-17	-56**	-47**	-10
Subjective Closeness	04	02	-06	22	49**	20
Fathers						
Education Level	27*	13	-03	31+	22	06
Academic Influence	-17	04	27*	14	33*	24
Positive Emotions	06	14	10	35*	53**	17
Negative Emotions	-21	-18	-10	-15	-36*	-04
Subjective Closeness	22	23	13	14	34*	06

Notes: Decimal points omitted. + $p < .10$; * $p < .05$; ** $p < .01$

TABLE 2. Standardized Regression Coefficients for Predicting Tenth-Graders' Academic Performance from Parents' Education & Parent-Adolescent Relationship Features.

Criterion – Academic Performance	β	Model Adj. R^2
Mothers		
1. GPA		30^{***}
Positive Emotions	20	
Negative Emotions	-43^{**}	
2. Academic Functioning		34^{***}
Academic Influence	30^{*}	
Positive Emotions	08	
Negative Emotions	- 20	
Subjective Closeness	24	
3. Academic Motivation		30^{***}
Education Level	-44^{**}	
Academic Influence	24	
Positive Emotions	37^{*}	
Fathers		
1. Academic Functioning		28^{**}
Academic Influence	26	
Positive Emotions	59^{**}	
Negative Emotions	- 12	
Subjective Closeness	- 29	

Notes: Decimal points omitted. * $p < .05$; ** $p < .01$; *** $p < .00$